

# UNITED STATES PATENT OFFICE.

GEORGE S. PAGE, OF STANLEY, NEW JERSEY.

## MANUFACTURE OF AND MATERIAL FOR ROOFING, &c.

SPECIFICATION forming part of Letters Patent No. 230,148, dated July 20, 1880.

Application filed June 21, 1880. (Specimens.)

*To all whom it may concern:*

Be it known that I, GEORGE SHEPARD PAGE, of Stanley, county of Morris, and State of New Jersey, have invented a new and useful  
5 Improvement in the Manufacture of and Material for Roofing and Other Purposes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to  
10 which it appertains to make and use the same.

The object of my invention is to produce a light and durable material for roofing and building purposes generally and for inclosing packages of merchandise to protect the same  
15 from moisture.

My invention consists in the saturation of felt, paper, or other material of a fibrous or textile nature with coal-tar or other suitable bituminous material, and subsequently pressing  
20 and drying the same by artificial heat.

The method heretofore practiced of saturating fabrics with coal-tar is objectionable, for the reason that too much of the bituminous material entered in or adhered to the same, so  
25 that when exposed to high degrees of temperature the bitumen runs down, filling the eaves-trough and often disfiguring the sides of the building, to say nothing in regard to the unpleasant and disagreeable work of handling  
30 such material.

It has heretofore been the object of manufacturers to get as much bitumen in and on to the fabric as possible to increase its weight, and they have resorted to "stuffing" the material with powdered steatite, ground stone,  
35 fine sand, clay, &c., so as to thicken up the coal-tar to prevent its running and to prevent detection of the presence of a surplus of coal-tar, as well as to prevent the layers from adhering to each other in the roll; and as this  
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material is usually sold by weight, and the coal-tar and mineral is much cheaper than the fabric, there is a pecuniary advantage only in thus heavily loading or saturating the fabric.

In carrying out my invention, the felt, paper, or other fabric of a fibrous or textile nature is passed through a vat or tank of liquid coal-tar or bitumen to saturate the same. It is then passed through pressing-rollers, which press the bitumen into the fabric so as to completely fill all the pores or spaces and remove the surplus of bitumen. The fabric is then exposed to artificial heat by passing it between or around heated cylinders or over heated plain surfaces to thoroughly dry the exterior  
45 50 55 60 and to remove the more volatile portions of the bitumen, which has the effect of sealing said surfaces and producing an article very little heavier than the fabric before saturation, with all the requisite waterproof qualities, and at the same time perfectly clean and pleasant to handle, and capable of being rolled into rolls as soon as it leaves the machine without danger of the layers adhering to each other.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The process herein described of saturating fabrics in coal-tar, then pressing and drying the same by artificial heat, substantially  
70 in the manner and for the purposes set forth.

2. As a new article of manufacture, felt, paper, or other fibrous or textile material saturated with coal-tar, pressed and subjected to artificial heat, for roofing and other purposes.  
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GEORGE SHEPARD PAGE.

Witnesses:

CHAS. E. BOOTH,

EDWD. M. ATKINSON.